PATENT COOPERATION TREATY

PCT

INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

(Chapter II of the Patent Cooperation Treaty)

(PCT Article 36 and Rule 70)

Applicant's or agent's file reference	FOR FURTHER A	CTION	See Form PCT/IPEA/416		
VALS 940 B PCT					
International application No.	International filing da		Priority date (day/month/year)		
PCT/FR2004/002006	27.07.200		08.08.2003		
International Patent Classification (IPC)	or national classification and	IPC			
B05B1/34					
Applicant		,			
VALOIS SAS					
 This report is the international preliminary examination report, established by this International Preliminary Examining Authority under Article 35 and transmitted to the applicant according to Article 36. 					
2. This REPORT consists of a to	tal of	sheets, including	g this cover sheet.		
3. This report is also accompanied by ANNEXES, comprising:					
a. (sent to the applicant and to the International Bureau) a total of sheets, as follows:					
sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications authorized by this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions).					
sheets which supersede earlier sheets, but which this Authority considers contain an amendment that goes beyond the disclosure in the international application as filed, as indicated in item 4 of Box No. I and the Supplemental					
Box.	**	·	••		
b. (sent to the Interna	<i>ational Bureau only)</i> a total of	(indicate type and numbe	r of electronic carrier(s))		
			_ , containing a sequence listing and/or tables		
related thereto, in computer readable form only, as indicated in the Supplemental Box Relating to Sequence Listing (see Section 802 of the Administrative Instructions).					
4. This report contains indication	s relating to the following iter	ns:			
Box No. I Basi	s of the report				
Box No. II Prior	Priority				
Box No. III Non	Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability				
Box No. IV Lack	Box No. IV Lack of unity of invention				
2 3 BOX 110. V	Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement				
Box No. VI Cert	Certain documents cited				
Box No. VII Cert	Certain defects in the international application				
Box No. VIII Cert	Box No. VIII Certain observations on the international application				
Date of submission of the demand Date of completion of this report		is report			
Name and mailing address of the IPEA/EP		Authorized officer			
Facsimile No.		Telephone No.			

Translation

INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

International application No.
PCT/FR2004/002006

			- 01/11/2001/00/2000
Box No. I	Basis of the report		
	ard to the language, this report is based on the internatio under this item.	nal application in the languag	e in which it was filed, unless otherwise
	s report is based on translations from the original langua ich is the language of a translation furnished for the purp		· ·
	international search (Rule 12.3 and 23.1(b))		
	publication of the international application (Rule 12.4)	
	international preliminary examination (Rule 55.2 and/	or 55.3)	
	ard to the elements of the international application, this Office in response to an invitation under Article 14 ar 11):		
the	international application as originally filed/furnished		
the	description:		
pag	es <u>1-5</u>		as originally filed/furnished
pag	es*	received by this Authority	on
pag	ges*		
⊠ the	claims:		
nos			os originally filed/frynished
nos	•	1-14	as originally filed/furnished
			ether with any statement) under Article 19 10.06.2005 with letter
nos		received by this Authority	
nos	.*	received by this Authority	On
the	drawings:		
she	ets 1/2,2/2		as originally filed/furnished
she	ets*	received by this Authority	on
she	ets*	received by this Authority	on
a se	equence listing and/or any related table(s) - see Supplem	ental Box Relating to Sequen	ce Listing.
3.	e amendments have resulted in the cancellation of:		
	the description, pages		
	the claims, nos.		_
	the drawings, sheets/figs		
	the sequence listing (specify):		
4. Thi	s report has been established as if (some of) the amend		
	y have been considered to go beyond the disclosure as fil		
	the description, pages	-	
	the claims, nos.		
	the drawings, sheets/figs		
	the sequence listing (specify):		
	any table(s) related to sequence listing (specify):	· · · · · · · · · · · · · · · · · · ·	
* If item 4 c	applies, some or all of those sheets may be marked "supe	erseded."	

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International application No.
PCT/FR2004/002006

Box No. V Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement				
1. Statement				
Novelty (N) Claims 3, 4, 6, 7	YES			
Claims 1, 2, 5, 8-10				
Inventive step (IS) Claims	YES			
Claims 1-10				
Industrial applicability (IA) Claims 1-10 Claims				
2. Citations and explanations (Rule 70.7)				
 Reference is made to the following documents: 				
D1: US 3 625 437 A (GARRIGOU GERARD CLAUDE)	7			
December 1971				
D2: US 4 923 448 A (ENNIS, III ET AL) May 19				
D3: FR 1 355 350 A (GREEN EDWARD H) 13 March	1964			
D4: EP 0 412 524 A (TOKO YAKUHIN KOGYO KK) 1	.3			
February 1991				
D5: EP 0 499 690 A (ELETTRO PLASTICA S.P.A)	26 August			
1992				
D6: FR-A-2 821 573 (VERBENA CORP N V) 6 Sept	.ember			
2002				
D1 (see passages cited in the international s	earch			
report) describes (the references between parentheses				
apply to said document):				
a spray head (2) for fluid, comprising a discharge				
channel (formed inside the head 2) provided with a				
spray port (14) and a spray profile made in the bottom				
wall of said spray head; said spray profile comprises				
spray channels (17), preferably non-radial, opening				
into a central spray chamber (16) located directly				
upstream of said spray port (14); an insert (8) is				
placed in said discharge channel (5) to form	the			
bottom of said spray profile (10); the centra	l axis of			
said insert (8) is substantially identical to	the			
central axis of said discharge channel; said	spray			

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Box No. V

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head (2) comprises centring means (19) for centring said insert (8); said discharge channel (formed inside the head 2) comprises said centring means (19) for centring said insert (8); and said centring means (19) are formed adjacent to the spray profile.

2.1 INDEPENDENT CLAIM 1

The fact that the spray head of D1 (reference (2) in D1) is described as an "insert", and that the insert (reference (8) in D1) is referred to therein as a "cylindrical pin" does not in any way prevent said elements from being considered to correspond to the respective definitions of a spray head and an insert. The applicant's attention is also drawn to the fact that the elements (19) effectively perform the function of centring the insert (8) relative to the head (2) (see, in particular, column 2, lines 52 to 57; column 4, lines 15 to 28).

The centring means (19) described in D1 extend to the plane of the spray profile and are therefore effectively formed adjacent to the spray profile.

Consequently, D1 describes in combination all the features defined in independent claim 1. The subject matter of said claim does not meet the PCT requirements of novelty (PCT Article 33(2)).

2.2 DEPENDENT CLAIMS

The dependent claims contain no features which, when combined with the features of any one of the claims to which they refer, meet the PCT requirements of novelty (PCT Article 33(2)), for the following reasons:

2.2.1 Claim 2

The elements (19) are effectively projections, of which there are four, and the diameter of the imaginary circle described by said projections (on

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Box No. V Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

surface 15) is substantially identical to the diameter of the insert (8) (see column 3, lines 61 to 64)). The variant of claim 2, in which there are three projections, is novel. However, it is not inventive, as providing three projections is merely one of several obvious options that a person skilled in the art seeking to centre the insert in the head might select, depending on each particular case, and without an inventive step being involved (see for example D2, D3, D5).

2.2.2 Claim 5

Claim 5 attempts to define said subject matter by the result to be achieved (obtaining eccentricity less than 0.08 mm, preferably less than 0.03 mm), yet this merely amounts to stating the basic problem the invention is intended to solve, without providing the technical features required to achieve this result. Since the features of claim 5 do not add technical differences that enable the subject matter of said claim to be clearly differentiated from the prior art (see D1), the subject matter of claim 5 fails to meet the PCT requirements of novelty (PCT Article 33(2)).

The applicant's attention is also drawn to the fact that the tolerance of ± 0.05 mm mentioned in D1 (column 3, lines 61 to 64) appears to have the consequence of a maximum eccentricity of 0.025 mm (instance where the insert having diameter D is floating within an inscribed diameter of D+0.05 mm).

2.2.3 Claim 8,

In what follows, the expression of claim 8 "are made according to" has been taken to mean "are consistent with".

A set of heads according to the wording of claim 8 is described in D1, column 4, lines 23 to 28.

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Box No. V Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

2.2.4 Claim 9

Claim 9 attempts to define the subject matter for which protection is sought by the result to be achieved, yet this merely amounts to stating the problem the invention is intended to solve, without providing the technical features required to achieve this result.

Since the features of claim 9 do not add technical differences that enable the subject matter of said claim to be clearly differentiated from the prior art (see D1), the subject matter of claim 9 fails to meet the PCT requirements of novelty (PCT Article 33(2)).

2.2.5 Claim 10

The spray head of D1 belongs to a dispensing device.

2.3 DEPENDENT CLAIMS 3, 4, 6, 7

Said claims contain no features which, when combined with the features of any one of the claims to which they refer, meet the PCT requirements of inventive step (PCT Article 33(3)).

2.3.1 Claim 3

The fact that the three projections are flat-shaped and symmetrically distributed is merely one of several obvious options that a person skilled in the art seeking to centre the insert in the head might select, depending on each particular case, and without an inventive step being involved (see for example D2, figure 3, 4 or D5, figure 3).

2.3.2 Claim 4

D1, which is considered to be the closest prior art, describes a spray head from which the one forming the subject matter of claim 4 differs in that the accesses from the discharge channel to the spray channels are formed between said projections.

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The problem that the present invention is intended to solve can be considered to be that of preventing one of the accesses from being closed by the insert during assembly of the latter.

According to the description provided in D3 (see page 4, right-hand column, last paragraph, to page 5, left-hand column, first paragraph; figure 7), the distribution of the tangential channels between the flats has the same advantages as those mentioned in the present application. Consequently, the inclusion of this feature in the spray head described in D1 is a routine design measure for a person skilled in the art seeking to solve the stated problem.

The solution proposed in claim 4 of the present application is therefore considered not to meet the PCT requirements of inventive step (PCT Article 33(3)).

2.3.3 Claims 6 & 7

The features of the diameter of the spray chamber and/or the spray port mentioned in said claims are merely some of several obvious options (see D4, column 5, lines 8 to 11; D6, page 7, line 24) that a person skilled in the art seeking to obtain a spray of good quality might select, depending on each particular case, and without an inventive step being involved.